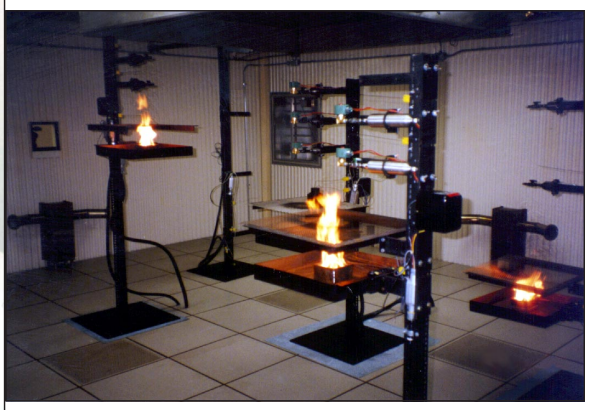
Laboratory Personnel Receive Federal Laboratory Consortium Awards for Technology Transfer



Payoff

The recognition of Dr. John E. Leland, Major Robert Tetla and Dr. Charles J. Kibert demonstrates additional examples of creativity and initiative used in the transfer of Air Force Research Laboratory sponsored technology to commercial applications. It highlights the world-class caliber of the Laboratory's scientific and engineering team and enhances its reputation as a leader in technology transfer.

Accomplishment

Researchers from Air Force Research Laboratory received a 1997 Federal Laboratory Consortium Award for Excellence in Technology Transfer. Dr. John E. Leland of the Propulsion Directorate was recognized for the transfer of adsorption cooling technology developed by Rocky Research Inc. for cooling electronics in military vehicles. Major Robert Tetla of the Air Vehicles Directorate and Dr. Charles J. Kibert of the University of Florida were jointly recognized for the transfer of a replacement agent for Halon 1301 and Halon 1211.

Background

The Federal Laboratory Consortium for Technology Transfer is a network of over 500 federal government research and development organizations representing 14 federal agencies. It was formed by Congress to identify technology transfer opportunities and transfer federally-sponsored research and development results to the commercial sector. Technology employed in the design of a new miniature adsorption-based refrigeration system to cool high heat flux electronics in electronically intensive aircraft and mobile military vehicles has spun-off into the development of several commercial product prototypes. This system, which works off the heats of adsorption and desorption of ammonia and a solid salt, can be scaled down to sizes appropriate for portable applications without any loss in efficiency. Major Tetla and Dr. Kibert participated in the development of Triodide™ (Pacific Scientific's brand name for trifluoroiodomethane (CF3I)), an environmentally safe fire retardant for Air Force aircraft fire protection. The commercial application of this military technology in the marine and aircraft industries and the auto racing community will aid in the future improvement of natural ecosystems, global climate and quality of human health worldwide. CF3I has been approved by the Environmental Protection Agency for use in non-residential applications.